AMENDMENTS TO THE CLAIMS

Please cancel claims 1 – 7, and 16 – 22. Please add claims 31 –44, as follows.

1   1 – 7.   (Canceled)

1   8.   (Withdrawn) A method of managing locks by a distributed lock management system,
2   the method comprising the steps of:
3   a first lock manager on a first node receiving a first request for a first lock on a
4   resource from a first requester;
5   wherein said distributed lock management system includes said first lock manager;
6   determining that said first request may not be granted because of a blocking
7   condition;
8   said first lock manager storing in a data structure first data that may be used by said
9   first requester to obtain notification that said blocking condition should no
10   longer cause denial of a request for a lock on said resource; and
11   said first lock manager transmitting to said first requester a first response that:
12   indicates that said first request is denied, and
13   includes a copy of said first data.

1   9.   (Withdrawn) The method of claim 8, wherein the steps include:
2   receiving a message that indicates that said blocking condition should no longer cause
3   denial of a request for a lock on said resource; and
4   modifying said data structure to indicate that said blocking condition should no longer
5   cause denial of a request for a lock on said resource.

1   10.   (Withdrawn) The method of claim 9, wherein the step of receiving said message
2   includes receiving said message from said first requester.

OID 2001-105-01

1   11.   (Withdrawn) The method of claim 8, wherein:

2   the steps further include said first lock manager transmitting to another lock manager

3   of said distributed lock management system a message requesting said first

4   lock on said resource; and

5   wherein the step of determining is based on a second response received from said

6   other lock manager indicating that said first request cannot be granted;

7   wherein said second response includes a copy of said first data.

1   12.   (Withdrawn) The method of claim 8, wherein the steps further include:

2   receiving a second request for another lock on said resource;

3   determining, based on said first data, that said second request may not be granted;

4   said first lock manager transmitting to said second requester another response that:

5   indicates that said second request is not granted, and

6   includes a copy of said first data.

1   13.   (Withdrawn) The method of claim 12, wherein:

2   said first lock manager is a master of said resource; and

3   wherein the step of receiving said second request includes receiving said second

4   request from another lock manager.

1   14.   (Withdrawn) The method of claim 12, wherein:

2   said first lock manager and a process are on a node, wherein said process is different

3   than said first requester; and

4   the step of receiving said second request includes receiving said second request from

5   said process.

OID 2001-105-01

1 15. (Withdrawn) The method of claim 8, wherein:

2   said distributed lock management system includes a master for said resource; and

3   wherein no lock is currently granted for said resource by said master.

1 16- 22. (Canceled)

1 23. (Withdrawn) A computer-readable medium carrying one or more sequences of

2   instructions for managing locks by a distributed lock management system, wherein

3   execution of the one or more sequences of instructions by one or more processors

4   causes the one or more processors to perform the steps of:

5   a first lock manager on a first node receiving a first request for a first lock on a

6   resource from a first requester;

7   wherein said distributed lock management system includes said first lock manager;

8   determining that said first request may not be granted because of a blocking

9   condition;

10   said first lock manager storing in a data structure first data that may be used by said

11   first requester to obtain notification that said blocking condition should no

12   longer cause denial of a request for a lock on said resource; and

13   said first lock manager transmitting to said first requester a first response that:

14   indicates that said first request is denied, and

15   includes a copy of said first data.

1 24. (Withdrawn) The computer-readable medium of claim 23, wherein the steps include:

2   receiving a message that indicates that said blocking condition should no longer cause

3   denial of a request for a lock on said resource; and

4   modifying said data structure to indicate that said blocking condition should no longer

5   cause denial of a request for a lock on said resource.

OID 2001-105-01

1   25.   (Withdrawn) The computer-readable medium of claim 24, wherein the step of

2   receiving said message includes receiving said message from said first requester.

1   26.   (Withdrawn) The computer-readable medium of claim 23, wherein:

2   the steps further include said first lock manager transmitting to another lock manager

3   of said distributed lock management system a message requesting said first

4   lock on said resource; and

5   wherein the step of determining is based on a second response received from said

6   other lock manager indicating that said first request cannot be granted;

7   wherein said second response includes a copy of said first data.

1   27.   (Withdrawn) The computer-readable medium of claim 23, wherein the steps further

2   include:

3   receiving a second request for another lock on said resource;

4   determining, based on said first data, that said second request may not be granted;

5   said first lock manager transmitting to said second requester another response that:

6   indicates that said second request is not granted, and

7   includes a copy of said first data.

1   28.   (Withdrawn) The computer-readable medium of claim 27, wherein:

2   said first lock manager is a master of said resource; and

3   wherein the step of receiving said second request includes receiving said second

4   request from another lock manager.

OID 2001-105-01

1 29. (Withdrawn) The computer-readable medium of claim 27, wherein:

2 said first lock manager and a process are on a node, wherein said process is different

3 than said first requester; and

4 the step of receiving said second request includes receiving said second request from

5 said process.

1 30. (Withdrawn) The computer-readable medium of claim 23, wherein:

2 said distributed lock management system includes a master for said resource; and

3 wherein no lock is currently granted for said resource by said master.

1 31. (New) A method, the method comprising the steps of:

2 a requester transmitting to a lock management system a request for a certain lock on a

3 first resource;

4 receiving a response from said lock management system that denies said request for a

5 certain lock on said first resource;

6 wherein said response that denies said request for a certain lock on said first resource

7 is caused by a blocking condition;

8 wherein said response includes data that identifies a second resource different than

9 said first resource;

10 wherein said lock management system does not grant a lock on said second resource

11 to said requester while said blocking condition is in effect; and

12 said requester determining said blocking condition is no longer in effect by

13 performing certain steps that include:

14 said requester transmitting to said lock management system a request for a

15 lock on said second resource; and

16 said requester receiving from said lock management system a response that

17 grants said request for said lock on said second resource.

OID 2001-105-01

1 32. (New) The method of claim 31, wherein said second resource is a transaction and said

2   first resource is a resource locked for said transaction.

1 33. (New) The method of claim 32, wherein said data that identifies a second resource

2   includes a transaction id identifying said transaction.

1 34. (New) The method of claim 31, wherein:

2   said first resource is a data block; and

3   said blocking condition is based on said data block undergoing a block-split

4   operation.

1 35. (New) The method of claim 34, wherein said data block is marked to indicate the data

2   block is undergoing said block split operation.

1 36. (New) The method of claim 31, further including in response to determining when

2   said blocking condition no longer prevents said lock management system from

3   granting a lock on said first resource, said first requester informing said lock

4   management system that said blocking condition is no longer in effect.

1 37. (New) The method of claim 31, said first requester informing said lock management

2   system that said blocking condition is no longer effect by making another request for

3   a lock of said first resource, said request including data specifying that said blocking

4   condition is no longer effect.

1 38. (New) A computer-readable medium carrying one or more sequences of instructions,

2   wherein execution of the one or more sequences of instructions by one or more

3   processors causes the one or more processors to perform the steps of:

4   a requester transmitting to a lock management system a request for a certain lock on a

5   first resource;

6   receiving a response from said lock management system that denies said request for a

7   certain lock on said first resource;

8   wherein said response that denies said request for a certain lock on said first resource

9   is caused by a blocking condition;

10   wherein said response includes data that identifies a second resource different than

11   said first resource;

12   wherein said lock management system does not grant a lock on said second resource

13   to said requester while said blocking condition is in effect; and

14   said requester determining said blocking condition is no longer in effect by

15   performing certain steps that include:

16   said requester transmitting to said lock management system a request for a

17   lock on said second resource; and

18   said requester receiving from said lock management system a response that

19   grants said request for said lock on said second resource.

1   39.   (New) The computer-readable medium of claim 38, wherein said second resource is a

2   transaction and said first resource is a resource locked for said transaction.

1   40.   (New) The computer-readable medium of claim 39, wherein said data that identifies a

2   second resource includes a transaction id identifying said transaction.

1   41.   (New) The computer-readable medium of claim 38, wherein:

2   said first resource is a data block; and

3   said blocking condition is based on said data block undergoing a block-split

4   operation.

1   42.   (New) The computer-readable medium of claim 41, wherein said data block is

2   marked to indicate the data block is undergoing said block split operation.

1   43.   (New) The computer-readable medium of claim 38, the one or more sequences of

2   instructions further including instructions for in response to determining when said

3   blocking condition no longer prevents said lock management system from granting a

4   lock on said first resource, said first requester informing said lock management

5   system that said blocking condition is no longer in effect.

1   44.   (New) The computer-readable medium of claim 38, the one or more sequences of

2   instructions further including instructions for said first requester informing said lock

3   management system that said blocking condition is no longer effect by making

4   another request for a lock of said first resource, said request including data

5   specifying that said blocking condition is no longer effect.